

## Early Flowering of Plants in 1945

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March and April, 1945, were remarkable in the northeastern United States for the prolonged period of warm weather. The high temperatures which broke meteorological records provided conditions which caused many species of plants to flower far ahead of their usual time. In the last few seasons, the writer has been interested to keep records of the first dates of flowering for the vicinity of Ithaca, New York. Shedding of pollen has been the criterion used for considering a plant to be in flower. Aided by colleagues and students in his course in taxonomy, the writer has made an attempt to find all native or naturalized species which might be in flower up to May 1. Comparison of the results for 1945 with the two seasons preceding is interesting. A similar survey in 1943 revealed 45 species in bloom before May 1; in 1944, 50 species were recorded; but in 1945, the list stood at 209. This surpasses by 90 species the report by Professor Fernald (*Rhodora* **12**: 127-129, 1910) of 119 species in flower in eastern Massachusetts in April, 1910. The list for the Ithaca region for 1945 is reproduced below with the earliest date when each species was found with ripe pollen. In a few cases, the first bloom was found on a cultivated specimen of a wild plant from a local source. These records are indicated by a "C" after the name. All records, unless otherwise noted, are from the vicinity of Ithaca, in Tompkins County, New York. A=April; M=March.

EQUISETUM ARVENSE—A 1	RANUNCULUS ABORTIVUS—A 9
EQUISETUM HYEMALE var. AFFINE—A 1	RANUNCULUS HISPIDUS—A 8
EQUISETUM SYLVATICUM—A 29	RANUNCULUS SEPTENDRIONALIS—A 24
EQUISETUM VARIEGATUM—A 17	THALICTRUM DIOICUM—A 9
LYCOPODIUM OBSCURUM—M 25	TROLLIUS LAXUS—A 8
OSMUNDA CLAYTONIANA—A 29	BERBERIS THUNBERGII—A 12
TAXUS BACCATA subsp. CANADENSIS—A 8	BERBERIS VULGARIS—A 24
ACTAEA RUBRA—A 17	CAULOPHYLLUM THALICTROIDES—A 3
ANEMONE QUINQUEFOLIA—A 8	JEFFERSONIA DIPHYLLO C—A 7
ANEMONELLA THALICTROIDES—M 30	LINDERA BENZOIN—A 1
CALTHA PALUSTRIS—A 1	SASSAFRAS ALBIDUM C—A 12
COPTIS TRIFOLIA subsp. GROENLANDICA—A 14	POPULUS BALSAMIFERA—M 29
HEPATICAC ACUTILOBA—M 25	POPULUS GRANDIDENTATA—A 1
HEPATICAC AMERICANA—A 1	POPULUS TREMULOIDES—M 18
HYDRASTIS CANADENSIS C—A 15	SALIX ALBA—A 17

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- SALIX BEBBIANA—A 1  
 SALIX CORDATA—A 1  
 SALIX DISCOLOR—M 28  
 SALIX FRAGILIS—A 4  
 SALIX HUMILIS—A 1  
 MALVA NEGLECTA—A 12  
 ULMUS AMERICANA—M 23  
 ULMUS FULVA—A 12 (in fruit)  
 GERANIUM MACULATUM—A 17  
 OXALIS STRICTA—M 29  
 ZANTHOXYLUM AMERICANUM C—A 12  
 POLYGALA PAUCIFOLIA—A 17  
 EUPHORBIA CYPARISSIAS C—A 12  
 VIOLA ARVENSIS—A 13 (Cortland County)  
 VIOLA BLANDA—A 15  
 VIOLA CANADENSIS—A 15  
 VIOLA CONSPERSA—A 1  
 VIOLA CUCULLATA—A 15  
 VIOLA FIMBRIATULA—A 29  
 VIOLA INCOGNITA—A 15  
 VIOLA ODORATA—M 28  
 VIOLA PALLENS—A 1  
 VIOLA PALMATA—A 24  
 VIOLA PENNSYLVANICA—A 8  
 VIOLA PUBESCENS—A 15  
 VIOLA RENIFOLIA—A 15  
 VIOLA ROSTRATA—A 14  
 VIOLA ROTUNDIFOLIA—A 15  
 VIOLA SELKIRKII—A 15  
 VIOLA SEPTENTRIONALIS—A 15  
 VIOLA SORORIA—A 1  
 VIOLA STRIATA—A 17  
 CHELIDONIUM MAJUS—A 13  
 SANGUINARIA CANADENSIS—M 29  
 DICENTRA CANADENSIS—A 17  
 DICENTRA CUCULLARIA—A 3  
 BARBAREA VULGARIS—A 10  
 CAPSELLA BURSA-PASTORIS—M 27  
 CARDAMINE BULBOSA—A 8  
 CARDAMINE PENNSYLVANICA—A 15  
 CARDAMINE PRATENSIS—A 13  
 DENTARIA DIPHYLLA—A 14  
 DENTARIA LACINIATA—A 3  
 DRABA VERNA—M 17  
 HESPERIS MATRONALIS—A 24  
 LEPIDIUM CAMPESTRE—A 24  
 THLASPI ARVENSE—A 25  
 ARENARIA SERPYLLIFOLIA—A 24  
 CERASTIUM VULGATUM—A 7  
 STELLARIA MEDIA—M 13  
 STELLARIA PUBERA—A 29  
 CLAYTONIA CAROLINIANA—A 3  
 CLAYTONIA VIRGINICA—A 3  
 RUMEX ACETOSELLA—A 13  
 EPIGAEA REPENS—A 1  
 RHODODENDRON NUDIFLORUM—A 22  
 VACCINIUM ANGUSTIFOLIUM—A 1  
 VACCINIUM CORYMBOSUM—A 29  
 FRAXINUS PENNSYLVANICA—A 7  
 PHLOX DIVARICATA—A 24  
 PHLOX SUBULATA—A 8  
 LITHOSPERMUM ARVENSE—A 12  
 MERTENSIA VIRGINICA C—A 6  
 MYOSOTIS SYLVATICA—A 16  
 PEDICULARIS CANADENSIS—A 17  
 LAMIUM AMPLEXICAULE—A 14  
 LAMIUM PURPUREUM—A 6  
 NEPETA HEDERACEA—A 9  
 VERONICA ARVENSIS—A 7  
 VERONICA DIDYMA—M 15  
 VERONICA FILIFORMIS C—A 12  
 VERONICA PEREGRINA—A 7  
 VERONICA SERPYLLIFOLIA—A 7  
 AMELANCHIER ARBOREA—A 8  
 AMELANCHIER INTERMEDIA—A 15  
 AMELANCHIER LAEVIS—A 3  
 AMELANCHIER SANGUINEA—A 29  
 CRATAEGUS FILIPES—A 21  
 CRATAEGUS MACROSPERMA—A 24  
 CRATAEGUS PRUINOSA—A 24  
 DUCHESNEA INDICA—A 24  
 FRAGARIA VESCA—A 15  
 FRAGARIA VIRGINIANA—A 1  
 PRUNUS AMERICANA—A 22  
 PRUNUS AVIUM—A 9  
 PRUNUS DOMESTICA—A 15  
 PRUNUS PENNSYLVANICA—A 15  
 PRUNUS VIRGINIANA—A 14  
 PYRUS COMMUNIS—A 11  
 PYRUS MALUS—A 12  
 RUBUS PUBESCENS—A 22  
 WALDSTEINIA FRAGARIOIDES—A 15  
 CHRYSOSPLENIUM AMERICANUM—A 1  
 MITELLA DIPHYLLA—A 15  
 RIBES AMERICANUM C—A 12  
 RIBES CYNOSBATI—A 15  
 RIBES HIRTELLUM C—A 12  
 RIBES ODORATUM C—A 12  
 RIBES SATIVUM—A 15  
 RIBES TRISTE—A 8

- SAXIFRAGA VIRGINIENSIS—A 8  
 TIARELLA CORDIFOLIA—A 15  
 MEDICAGO LUPULINA—A 5  
 TRIFOLIUM REPENS—A 13  
 VICIA CAROLINIANA—A 17  
 ASARUM CANADENSE—A 3  
 STAPHYLEA TRIFOLIA C—A 12  
 DAPHNE MEZEREUM—M 27  
 DIRCA PALUSTRIS—A 1  
 SHEPHERDIA CANADENSIS C—A 7  
 COMANDRA UMBELLATA—A 29  
 ACER NEGUNDO—M 29  
 ACER PENNSYLVANICUM—A 24  
 ACER RUBRUM—M 27  
 ACER SACCHARINUM—M 15  
 ACER SACCHARUM—A 1  
 RHUS AROMATICA—A 1  
 QUERCUS ALBA—A 24  
 ALNUS INCANA—M 18  
 ALNUS RUGOSA—M 18  
 BETULA PAPYRIFERA C—A 12  
 BETULA POPULIFOLIA—A 1  
 CARPINUS CAROLINIANA—A 15  
 CORYLUS CORNUTA—M 18  
 OSTRYA VIRGINIANA—A 9  
 MYRICA PEREGRINA C—A 12  
 PANAX TRIFOLIUM—A 15  
 ZIZIA AUREA—A 16  
 GALIUM APARINE—A 24  
 HOUSTONIA CAERULEA—A 15  
 LONICERA CANADENSIS—A 1  
 LONICERA TATARICA—A 13  
 SAMBUCUS RACEMOSA subsp. PUBENS—A 12  
 VIBURNUM ALNIFOLIUM—A 14  
 ANTENNARIA CANADENSIS—A 15  
 ANTENNARIA FALLAX—A 28  
 ANTENNARIA NEGLECTA—A 15  
 ANTENNARIA NEODIOICA—A 14  
 ANTENNARIA PLANTAGINIFOLIA—A 8  
 BELLIS PERENNIS—M 14  
 SENECIO AUREUS—A 29  
 SENECIO VULGARIS—M 30  
 TARAXACUM OFFICINALE—M 14  
 TUSSILAGO FARFARA—M 18  
 ERYTHRONIUM AMERICANUM—M 30  
 POLYGONATUM PUBESCENS—A 17  
 TRILLIUM ERECTUM—A 3  
 TRILLIUM GRANDIFLORUM—A 3  
 TRILLIUM UNDULATUM—A 29  
 UVULARIA GRANDIFLORA—A 17  
 UVULARIA PERFOLIATA—A 24  
 UVULARIA SESSILIFOLIA—A 14  
 LUZULA ACUMINATA—A 1  
 LUZULA CAMPESTRIS—A 24  
 ARISAEMA TRIPHYLLUM—A 3  
 SYMPLÔCARPUS FOETIDUS—M 14  
 CAREX ANCEPS—A 22  
 CAREX ARCTATA—A 15  
 CAREX ARTIIFECTA—A 17  
 CAREX BLANDA—A 17  
 CAREX BROMOIDES—A 29  
 CAREX COMMUNIS—A 1  
 CAREX DEWEYANA—A 29  
 CAREX HIRTIFOLIA—A 17  
 CAREX LAXICULMIS—A 15  
 CAREX PEDUNCULATA—A 1  
 CAREX PENNSYLVANICA—A 1  
 CAREX PLANTAGINEA—A 1  
 CAREX PLATYPHYLLA—A 3  
 CAREX PRASINA—A 29  
 CAREX SCABRATA—A 29  
 CAREX STIPATA—A 24  
 CAREX UMBELLATA—A 1  
 ALOPECURUS PRATENSIS—A 14  
 ORYZOPSIS ASPERIFOLIA—A 15  
 POA ANNUA—M 20  
 POA PRATENSIS—A 13  
 HYPOXIS HIRSUTA C—A 15  
 CYPRIPIEDIUM PARVIFLORUM C—A 27

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